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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,870	07/31/2003	Adel Fanous	1875.1680007	9079

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WASHINGTON, DC 20005

EXAMINER

TON, MY TRANG

ART UNIT	PAPER NUMBER
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2816

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/630,870

Applicant(s)

FANOUS ET AL.

Examiner

My-Trang N. Ton

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MLW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1/12/04.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: mytrangan

DETAILED ACTION

Information Disclosure Statement

The International search report cited on PTOL 1449 was not considered at this time since is not readily available to the Examiner. To expedite prosecution, it is requested that Applicant submits a copy of this international search report for consideration.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation "all of the impedance devices are resistors" recited in claim 4 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the impedance devices" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Siniscalchi et al (U.S Patent 5,994,926).

Siniscalchi et al disclose in Fig. 1 a programmably variable transconductance circuit including:

a first pair of active devices (26 and 28) having common terminals thereof coupled together, wherein a control terminal of a first device (26) of the first pair forms a first type non-inverting amplifier input port (38) and an output terminal thereof forms an inverting amplifier output port (34);

wherein a control terminal of a second device (28) of the first pair forms a first type inverting amplifier input port (40);

a second pair of active devices (30 and 32) having common terminals thereof coupled together, wherein a control terminal of a first device (32) of the second pair is coupled to the control terminal of the second device (28) of the first pair, wherein an output terminal of a second device (30) of the second pair forms a non-inverting amplifier output port (36), and wherein a control terminal of the second device (30) of the second pair is coupled to the control terminal of the first device (26) of the first pair; and

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a third pair of active devices (16 and 18) having common terminals thereof coupled together (via 24), wherein a control terminal of a first device (16) of the third pair forms a second type non-inverting input port (17) and an output terminal thereof is coupled to the common terminal of the first device (26) of the first pair;

wherein a control terminal of a second device (18) of the third pair forms a second type inverting input port (19) and a common terminal thereof is coupled to the common terminal of the first device (32) of the second pair as recited in claim 1.

The active devices are transistors (16, 18, 26, 28, 30, 32) as recited in claim 2.

Due to indefiniteness, the limitations "all of the impedance devices are resistors" recited in claim 4 can not given sufficient weight to read over the reference.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Siniscalchi et al as applied to claims 1 and 2 above.

As noted above, every element of the claimed invention recited in above claims can be seen in the circuit of Siniscalchi et al. However, this reference does not specifically disclose "the common terminal are respectively a gate, a drain, and a source" recited in claim 3.

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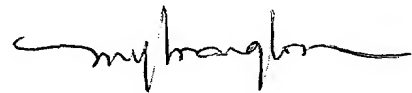
However, field effect transistors (having gate, drain, source) are well-known switching devices and patentable equivalent to bipolar transistors (having base, emitter, collector) since no unobvious results are seen produce from their use. Therefore, it would have been obvious at the time of the invention was made for one skilled in the art to utilize these particular types of transistors because of this well-known advantages in performance and integration.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ton whose telephone number is (703) 308-4868. The examiner can normally be reached on Monday to Thursday from 7 a.m to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached on (703) 308-4876. The fax phone number for this Group is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

January 12, 2004



My-Trang Ton
Primary Examiner
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